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PATENT
Attorney Docket No. ASC-012DV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Lee et al.
SERIAL NO.: Not yet assigned GROUP NO.: Not yet assigned
FILING DATE: Herewith EXAMINER: Not yet assigned
TITLE: STRUCTURES WITH PLANAR STRAINED LAYERS

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, which have been submitted for the parent case from which this divisional application depends (divisional of prior application Serial No. 10/211,126, filed on August 2, 2002, which claims the benefit of U.S. Provisional Application No. 60/310,346, filed August 6, 2001). In accordance with the provisions of 37 C.F.R. § 1.98(d), copies of the references are not enclosed as these references were previously submitted to the U.S. Patent and Trademark Office in the parent application but are available upon request.

REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

- ☒ (1) within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or
- ☐ (2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and

- ☐ the requisite Statement is below, **OR**
- ☐ the requisite fee under 37 C.F.R. 1.17(p), namely **\$180.00**, is included herein, or
- ☐ (3) after the mailing date of a **final action** or **notice of allowance** but before the payment of the **issue fee**, **AND**
- ☐ the requisite Statement is below, **AND**
- ☐ the requisite petition fee under 37 C.F.R. 1.17(p), namely **\$180.00** is included herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

Respectfully submitted,

Date: February 27, 2004
Reg. No. 44,381

Tel. No.: (617) 310-8327
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VER 12/00
3029581-1



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FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT	ATTORNEY DOCKET NO.: ASC-012DV
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U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A1	4,710,788	12/01/1987	Dämbkes et al.			
	A2	4,990,979	02/05/1991	Otto			
	A3	5,241,197	08/31/1993	Murakami et al.			
	A4	5,291,439	03/01/1994	Kauffmann et al.			
	A5	5,442,205	08/15/1995	Brasen et al.			
	A6	5,523,592	06/04/1996	Nakagawa et al.			
	A7	5,534,713	07/09/1996	Ismail et al.			

FOREIGN PATENT DOCUMENTS

EXAM INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B1	41 01 167 A1	07/23/1992	DE				No	Yes (abstract only)
	B2	4-307974	10/30/1992	JP				No	No
	B3	7-106446	04/21/1995	JP				No	No
	B4	0 683 522 A2	11/22/1995	EP				No	Yes
	B5	0 829 908 A2	03/18/1998	EP				No	Yes

OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C1	Meyerson et al., "Cooperative Growth Phenomena in Silicon/Germanium Low-Temperature Epitaxy," <u>Applied Physics Letters</u> , Vol. 53, No. 25 (December 19, 1988) pp. 2555-2557.
	C2	Garone et al., "Silicon vapor phase epitaxial growth catalysis by the presence of germane," <u>Applied Physics Letters</u> , Vol. 56, No. 13 (March 26, 1990) pp. 1275-1277.
	C3	Robbins et al., "A model for heterogeneous growth of Si _{1-x} Ge _x films for hydrides," <u>Journal of Applied Physics</u> , Vol. 69, No. 6 (March 15, 1991) pp. 3729-3732.
	C4	"2 Bit/Cell EEPROM Cell Using Band-to-Band Tunneling for Data Read-Out," <u>IBM Technical Disclosure Bulletin</u> , Vol. 35, No. 4B (September 1992) pp. 136-140.
	C5	Wesler et al., "NMOS and PMOS Transistors Fabricated in Strained Silicon/Relaxed Silicon-Germanium Structures," <u>Electron Devices Meeting, 1992. Technical Digest</u> (December 13, 1992) pp. 31.7.1-31.7.3.
	C6	Grützmacher et al., "Ge segregation in SiGe/Si heterostructures and its dependence on deposition technique and growth atmosphere," <u>Applied Physics Letters</u> , Vol. 63, No. 18 (November 1, 1993) pp. 2531-2533.
EXAMINER		DATE CONSIDERED

FORM PTO - 1449	ATTORNEY DOCKET NO.: ASC-012DV
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U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A8	5,596,527	01/12/1997	Tomioka et al.			
	A9	5,617,351	04/01/1997	Bertin et al.			
	A10	5,683,934	11/04/1997	Candelaria			
	A11	5,739,567	04/14/1998	Wong			
	A12	5,777,347	07/07/1998	Bartelink			
	A13	5,786,612	07/28/1998	Otani et al.			
	A14	5,792,679	08/11/1998	Nakato			
	A15	5,808,344	09/15/1998	Ismail et al.			
	A16	5,891,769	04/06/1999	Liaw et al.			
	A17	5,906,951	05/25/1999	Chu et al.			
	A18	5,998,807	12/07/1999	Lustig et al.			

FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B6	0 838 858 A2	04/29/1998	EP				No	Yes
	B7	11-233744	08/27/1999	JP				No	No
	B8	WO 98/59365	12/30/1998	PCT				No	Yes
	B9	WO 99/53539	10/21/1999	PCT				No	Yes
	B10	2001319935	05/2000	JP				Yes	No

OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C7	Welser et al., "Evidence of Real-Space Hot-Electron Transfer in High Mobility, Strained-Si Multilayer MOSFETs," <u>Electron Devices meetings, 1993. Technical Digest</u> (December 1993) pp. 21.3.1-21.3.4.
	C8	Cullis et al., "Growth ripples upon strained SiGe epitaxial layers on Si and misfit dislocation interactions," <u>Journal of Vacuum Science and Technology A</u> , Vol. 12, No. 4 (July/August 1994) pp. 1924-1931.
	C9	Tweet et al., "Factors determining the composition of strained GeSi layers grown with disilane and germane," <u>Applied Physics Letters</u> , Vol. 65, No. 20 (November 14, 1994) pp. 2579-2581.
EXAMINER		DATE CONSIDERED

FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT	ATTORNEY DOCKET NO.: ASC-012DV APPLICANTS: Lee et al. SERIAL NO.: Not yet assigned FILING DATE: Herewith GROUP: Not yet assigned
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U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A19	6,013,134	01/11/2000	Chu et al.			
	A20	6,058,044	05/02/2000	Sugiura et al.			
	A21	6,059,895	05/09/2000	Chu et al.			

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EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B11	1 020 900 A2	07/19/2000	EP				No	Yes
	B12	WO 00/54338	09/14/2000	PCT				No	Yes
	B13	WO 01/54202 A1	07/26/2001	PCT				No	Yes
	B14	WO 01/93338 A1	12/06/2001	PCT				No	Yes
	B15	WO 01/99169 A2	12/27/2001	PCT				No	Yes
	B16	1 174 928 A1	01/23/2002	EP				No	Yes

OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C10	Armstrong et al., "Design of Si/SiGe Heterojunction Complementary Metal-Oxide-Semiconductor Transistors," <u>IEDM Technical Digest</u> (1995) pp. 761-764.
	C11	König et al., "SiGe HBTs and HFETs," <u>Solid-State Electronics</u> , Vol. 38, No. 9 (1995) pp. 1595-1602.
	C12	Rim et al., "Enhanced Hole Mobilities in Surface-Channel Strained-Si p-MOSFETs," <u>Solid State Electronics Laboratory, Stanford University, Stanford, CA 94305</u> (1995) pp. 20.3.1-20.3.4.
	C13	Welser, "The Application of Strained Silicon/Relaxed Silicon Germanium Heterostructures to Metal-Oxide-Semiconductor Field-Effect Transistors," Ph.D. Thesis, Stanford University (1995) pp. 1-205.
	C14	Sadek et al., "Design of Si/SiGe Heterojunction Complementary Metal-Oxide-Semiconductor Transistors," <u>IEEE Transactions on Electron Devices</u> , Vol. 43, No. 8 (August 1996) pp. 1224-1232.
	C15	Nayak et al., "High Mobility Strained-Si PMOSFET's," <u>IEEE Transactions on Electron Devices</u> , Vol. 43, No. 10 (October 1996) pp. 1709-1716.
	C16	Schäffler, "High-mobility Si and Ge structures," <u>Semicond. Sci. Technol.</u> , Vol. 12 (1997) pp. 1515-1549.
	C17	Usami et al., "Spectroscopic study of Si-based quantum wells with neighboring confinement structure," <u>Semicon. Sci. Technol.</u> (1997) (abstract).

EXAMINER

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FORM PTO - 1449	ATTORNEY DOCKET NO.: ASC-012DV
INFORMATION DISCLOSURE STATEMENT	APPLICANTS: Lee et al.
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U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A22	6,096,590	08/01/2000	Chan et al.			
	A23	6,107,653	08/22/2000	Fitzgerald			
	A24	6,111,267	08/29/2000	Fischer et al.			
	A25	6,117,750	09/12/2000	Bensahel et al.			
	A26	6,130,453	10/10/2000	Mei et al.			
	A27	6,143,636	11/07/2000	Forbes et al.			
	A28	6,204,529	03/20/2001	Lung et al.			
	A29	6,207,977 B1	03/27/2001	Augusto			
	A30	US 2001/0003364 A1	06/14/2001	Sugawara et al.			
	A31	6,249,022	06/19/2001	Lin et al.			
	A32	6,251,755 B1	06/26/2001	Furukawa et al.			
	A33	6,266,278	07/24/2001	Harari et al.			
	A34	US 2002/0100942 A1	08/01/2001	Fitzgerald et al.			
	A35	6,339,232 B1	01/15/2002	Takagi			

FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B17	WO 02/15244A2	02/21/2002	PCT				No	Yes
	B18	WO 02/13262 A2	02/14/2002	PCT				No	Yes
	B19	WO 02/47168 A2	06/13/2002	PCT				No	Yes
	B20	WO 02/071488 A1	09/12/2002	PCT				No	Yes
	B21	WO 02/071491 A1	09/12/2002	PCT				No	Yes

OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C18	König et al., "Design Rules for n-Type SiGe Hetero FETs," <u>Solid State Electronics</u> , Vol. 41, No. 10 (1997), pp. 1541-1547.
	C19	Höck et al., "Carrier mobilities in modulation doped Si _{1-x} Ge _x heterostructures with respect to FET applications," <u>Thin Solid Films</u> , Vol. 336 (1998) pp. 141-144.

EXAMINER	DATE CONSIDERED
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U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A36	6,350,993 B1	02/26/2002	Chu et al.			
	A37	US 2002/0125471 A1	09/12/2002	Fitzgerald et al.			12/04/2001
	A38	US 2002/140031 A1	10/03/2002	Rim			03/31/2001
	A39	US 2002/0125497 A1	09/12/2002	Fitzgerald			07/16/2001

FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B22	WO 02/071495 A1	09/12/2002	PCT				No	Yes

OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)								
	C20	Maiti et al., "Strained-Si heterostructure field effect transistors," <u>Semicond. Sci. Technol.</u> , Vol. 13 (1998) pp. 1225-1246.							
	C21	Hackbarth et al., "Strain relieved SiGe buffers for Si-based heterostructure field-effect transistors," <u>Journal of Crystal Growth</u> , Vol. 201 (1999) pp. 734-738							
	C22	Armstrong, "Technology for SiGe Heterostructure-Based CMOS Devices," Submitted to the Massachusetts Institute of Technology Department of Electrical Engineering and Computer Science on June 30, 1999, pp. 1-154.							
	C23	O'Neill et al., "SiGe Virtual substrate N-channel heterojunction MOSFETS," <u>Semicond. Sci. Technol.</u> , Vol. 14 (1999) pp. 784-789.							
	C24	Rim, "Application of Silicon Based Heterostructures to Enhanced Mobility Metal-Oxide-Semiconductor Field-Effect Transistors," Ph.D. Thesis, Stanford University (July 1999) pp. 1-184							
	C25	Parker et al., "SiGe heterostructure CMOS circuits and applications," <u>Solid State Electronics</u> , Vol. 43, No. 8, (August 1999) pp. 1497-1506.							
EXAMINER					DATE CONSIDERED				

FORM PTO - 1449	ATTORNEY DOCKET NO.: ASC-012DV
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OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C26	Xie, "SiGe Field effect transistors," <u>Materials Science and Engineering</u> , Vol. 25 (1999) pp. 89-121.
	C27	Hackbarth et al., "Alternatives to thick MBE-grown relaxed SiGe buffers," <u>Thin Solid Films</u> , Vol. 369, No. 1-2 (2000) pp. 148-151.
	C28	Herzog et al., "SiGe-based FETs: buffer issues and device results," <u>Thin Solid Films</u> , Vol. 380 (2000) pp. 36-41.
	C29	Mizuno et al., "Electron and Hole Mobility Enhancement in Strained-Si MOSFET's on SiGe-on-Insulator Substrates Fabricated by SIMOX Technology," <u>IEEE Electron Device Letters</u> , Vol. 21, No. 5 (May 2000) pp. 230-232.
	C30	Höck et al., "High hole mobility in Si _{0.17} Ge _{0.83} channel metal-oxide-semiconductor field-effect transistors grown by plasma-enhanced chemical vapor deposition," <u>Applied Physics Letters</u> , Volume 76, No. 26 (June 26, 2000) pp. 3920-3922.
	C31	Rim et al., "Fabrication and Analysis of Deep Submicron Strained-Si N-MOSFET's," <u>IEEE Transactions on Electron Devices</u> , Vol. 47, No. 7 (July 2000) pp. 1406-1415.
	C32	Barradas et al., "RBS analysis of MBE-grown Si/Ge(001) Si heterostructures with thin, high Ge content SiGe channels for HMOS transistors," <u>Modern Physics Letters B</u> (2001) (abstract)
	C33	Cheng et al., "Relaxed Silicon-Germanium on Insulator Substrate by Layer Transfer," <u>Journal of Electronic Materials</u> , Volume 30, No. 12 (2001) pp. L37-L39
	C34	Lee et al., "Strained Ge channel p-type metal-oxide-semiconductor field-effect transistors grown on Si _{1-x} Ge _x /Si virtual substrates," <u>Applied Physics Letters</u> , Volume 79, No. 20 (November 12, 2001) pp. 3344-3346.
	C35	Leitz et al., "Hole mobility enhancements in strained Si/Si _{1-y} Ge _y p-type metal-oxide-semiconductor field-effect transistors grown on relaxed Si _{1-x} Ge _x (x<y) virtual substrates," <u>Applied Physics Letters</u> , Volume 79, No. 25 (December 17, 2001) pp. 4246-4248.
	C36	Canaperi et al., "Preparation of a relaxed Si-Ge layer on an insulator in fabricating high-speed semiconductor devices with strained epitaxial films," <u>Intern. Business Machines Corporation, USA</u> (2002) (abstract).
EXAMINER		DATE CONSIDERED

FORM PTO - 1449	ATTORNEY DOCKET NO.: ASC-012DV
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FOREIGN PATENT DOCUMENTS									
EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)

OTHER ART, JOURNAL ARTICLES, ETC.	
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)
	C37 Lee et al., "Strained Ge channel <i>p</i> -type MOSFETs fabricated on Si _{1-x} Ge _x /Si virtual substrates," <u>Mat. Res. Soc. Symp. Proc.</u> , Volume 686 (2002) pp. A1.9.1-A1.9.5.
	C38 Leitz et al., "Channel Engineering of SiGe-Based Heterostructures for High Mobility MOSFETs," <u>Mat. Res. Soc. Symp. Proc.</u> , Volume 686 (2002) pp. A3.10.1-A3.10.6.
	C39 Li et al., "Design of high speed Si/SiGe heterojunction complementary metal-oxide-semiconductor field effect transistors with reduced short-channel effects," <u>J. Vac. Sci. Technol.</u> , A 20(3) (May/June 2002) pp. 1030-1033.

EXAMINER	DATE CONSIDERED
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OTHER ART, JOURNAL ARTICLES, ETC.									
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)								
	C40	Eaglesham et al., "Dislocation-Free Stranski-Krastanow Growth of Ge on Si(100)," <u>Physical Review Letters</u> , Vol. 64, No. 16 (April 16, 1990) pp. 1943-1946.							
	C41	Fitzgerald et al., "Totally relaxed Ge _x Si _{1-x} layers with low threading dislocation densities grown on Si substrates," <u>Appl. Phys. Lett.</u> , Vol. 59, No. 7 (August 12, 1991) pp. 811-813.							
	C42	Fitzgerald et al., "Relaxed Ge _x Si _{1-x} structures for III-V integration with Si and high mobility two-dimensional electron gases in Si," <u>J. Vac. Sci. Technol. B</u> , Volume 10, No. 4 (July/August 1992) pp. 1807-1819.							
	C43	Xie et al., "Very high mobility two-dimensional hole gas in Si/ Ge _x Si _{1-x} /Ge structures grown by molecular beam epitaxy," <u>Appl. Phys. Lett.</u> , Vol. 63, No. 16 (October 18, 1993) pp. 2263-2264.							
	C44	Wesler et al., "Electron Mobility Enhancement in Strained-Si N-Type Metal-Oxide-Semiconductor Field-Effect Transistors," <u>IEEE Electron Device Letters</u> , Vol. 15, No. 3 (March 1994) pp. 100-102.							
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OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)								
	C45	Ismail et al., "Modulation-doped n-type Si/SiGe with inverted interface," <u>Appl. Phys. Lett.</u> , Vol. 65, No. 10 (September 5, 1994) pp. 1248-1250.							
	C46	Xie et al., "Semiconductor Surface Roughness: Dependence on Sign and Magnitude of Bulk Strain," <u>The Physical Review Letters</u> , Vol. 73, No. 22 (November 28, 1994) pp. 3006-3009.							
	C47	Bouillon et al., "Search for the optimal channel architecture for 0.18/0.12 μ m bulk CMOS Experimental study," <u>IEEE</u> , (1996) pp. 21.2.1-21.2.4.							
	C48	Kearney et al., "The effect of alloy scattering on the mobility of holes in a Si _{1-x} Ge _x quantum well," <u>Semicond. Sci Technol.</u> , Vol. 13 (1998) pp. 174-180.							
	C49	Höck et al., "High performance 0.25 μ m p-type Ge/SiGe MODFETs," <u>Electronics Letters</u> , Vol. 34, No. 19 (September 17, 1998) pp. 1888-1889.							

EXAMINER

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OTHER ART, JOURNAL ARTICLES, ETC.	
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)
	C50 Bufler et al., "Hole transport in strained Si _{1-x} Ge _x alloys on Si _{1-y} Ge _y substrates," <u>Journal of Applied Physics</u> , Vol. 84, No. 10 (November 15, 1998) pp. 5597-5602.
	C51 Fitzgerald et al., "Dislocation dynamics in relaxed graded composition semiconductors," <u>Materials Science and Engineering B67</u> , (1999) pp. 53-61.
	C52 Fischetti, "Long-range Coulomb interactions in small Si devices. Part II. Effective electron mobility in thin-oxide structures," <u>Journal of Applied Physics</u> , Vol. 89, No. 2 (January 15, 2001) pp. 1232-1250.
	C53 Cheng et al., "Electron Mobility Enhancement in Strained-Si n-MOSFETs Fabricated on SiGe-on-Insulator (SGOI) Substrates," <u>IEEE Electron Device Letters</u> , Vol. 22, No. 7 (July 2001) pp. 321-323.
	C54 Leitz et al., "Dislocation glide and blocking kinetics in compositionally graded SiGe/Si," <u>Journal of Applied Physics</u> , Vol. 90, No. 6 (September 15, 2001) pp. 2730-2736.
	C55 Currie et al., "Carrier mobilities and process stability of strained S in- and p-MOSFETs on SiGe virtual substrates," <u>J. Vac. Sci. Technol. B</u> , Vol. 19, No. 6 (Nov/Dec 2001) pp. 2268-2279.
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	APPLICANTS: Lee et al.
	SERIAL NO.: Not yet assigned
	FILING DATE: Herewith GROUP: Not yet assigned

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EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A40	6,399,970 B2	06/04/2002	Kubo et al.			

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EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)								
EXAMINER					DATE CONSIDERED				

FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT	ATTORNEY DOCKET NO.: ASC-012DV
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	SERIAL NO.: Not yet assigned
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	C56	Ransom et al., "Gate-Self-Aligned n-channel and p-channel Germanium MOSFET's," <u>IEEE Transactions on Electron Devices</u> , Vol. 38, No. 12 (December 1991) pp. 2695.						
	C57	König et al., "p-Type Ge-Channel MODFET's with High Transconductance Grown on Si Substrates," <u>IEEE Electron Device Letters</u> , Vol. 14, No. 4 (April 1993) pp. 205-207.						
	C58	Fischetti et al., "Band structure, deformation potentials, and carrier mobility in strained Si, Ge, and SiGe alloys," <u>J. Appl. Phys.</u> , Vol. 80, No. 4 (August 15, 1996) pp. 2234-2252.						
	C59	Currie et al., "Controlling threading dislocation densities in Ge on Si using graded SiGe layers and chemical-mechanical polishing," <u>Applied Physics Letters</u> , Vol. 72, No. 14 (April 6, 1998) pp 1718-1720.						
	C60	Reinking et al., "Fabrication of high-mobility Ge p-channel MOSFETs on Si substrates," <u>Electronics Letters</u> , Vol. 35, No. 6 (March 18, 1999) pp. 503-504.						
	C61	Koester et al., "Extremely High Transconductance Ge/Si _{0.4} Ge _{0.6} p-MODFET's Grown by UHV-CVD," <u>IEEE Electron Device Letters</u> , Vol. 21, No. 3 (March 2000) pp. 110-112.						
	C62	Carlin et al., "High Efficiency GaAs-on-Si Solar Cells with High V _{oc} Using Graded GeSi Buffers," <u>IEEE</u> (2000) pp. 1006-1011						
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	SERIAL NO.: Not yet assigned
	FILING DATE: Herewith
	GROUP: Not yet assigned

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	A41	5,780,922	07/14/1998	Mishra et al.			
	A42	5,986,287	11/16/1999	Eberl et al.			
	A43	6,498,359	12/24/2002	Schmidt et al.			05/18/2001

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EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG Y/N
	B23	63122176	05/26/88	JP				Y	Y

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EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)								
	C63	Reinking et al., "Fabrication of High-Mobility Ge p-Channel MOSFETs on Si Substrates," <u>Electronics Letters</u> , Vol. 35, No. 6 (March 18, 1999) pp. 503-504.							
	C64	Rosenblad et al., "Virtual Substrates for the n- and p-type Si-MODFET Grown at Very High Rates," <u>Materials Science and Engineering</u> , Vol. B74 (2000) pp. 113-117.							
	C65	Ueno et al., "Low Temperature Buffer Growth for Modulation Doped SiGe/Ge/SiGe Heterostructures with High Hole Mobility," <u>Thin Solid Films</u> , Vol. 369 (2000) pp. 320-323.							
	C66	Yousif et al., "Recent Critical Issues in Si/Si _{1-x} Ge _x /Si Heterostructure FET Devices," <u>Solid-State Electronics</u> , Vol. 45, No. 11 (2001) pp. 1931-1937.							
	C67	Anonymous, "Germanium P-Channel Mosfet," <u>IBM Technical Disclosure Bulletin</u> , Vol. 28, No. 2 (July 1, 1985) p. 500.							

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	APPLICANTS: Lee et al.
	SERIAL NO.: Not yet assigned
	FILING DATE: Herewith GROUP: Not yet assigned

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EXAM. INIT.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE

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EXAM. INIT.	DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)

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	C68	Aigouy et al., "MOVPE Growth and optical characterization of ZnSe/ZnS strained layer superlattices," <u>Superlattices and Microstructures</u> , Vol. 16, No. 1 (1994) pp. 71-76
	C69	Kikkawa et al., "Effect of strained InGaAs step bunching on mobility and device performance in n-InGaP/InGaAs/GaAs pseudomorphic heterostructures grown by metalorganic vapor phase epitaxy," <u>Journal of Crystal Growth</u> , Vol. 145 (1994) pp. 799-807.
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APPLICANTS: Lee et al.

SERIAL NO.: Not yet assigned

FILING DATE: Herewith

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EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A44	5,963,817	10/05/1999	Chu et al.			
	A45	2002/0100942	08/01/2002	Fitzgerald et al.			
	A46	2002/0123197	09/05/2002	Fitzgerald et al.			06/19/2001
	A47	2002/0125471	09/12/2002	Fitzgerald et al.			12/04/2001
	A48	2002/0125497	09/12/2002	Fitzgerald			07/16/2001
	A49	2002/0197803	12/26/2002	Leitz et al.			06/21/2002
	A50	2003/0013323	01/16/2003	Hammond et al.			06/14/2002
	A51	2003/0052334	03/20/2003	Lee et al.			06/18/2002

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EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B24	02241195	08/28/2002	JP			02/15/2001	NO	YES

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EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)

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	APPLICANTS:	Lee et al.
	SERIAL NO.:	Not yet assigned
	FILING DATE:	Herewith
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EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A52	2003/0057439	03/27/2003	Fitzgerald			08/09/2002
	A53	2003/0077867	04/24/2003	Fitzgerald			07/16/2001
	A54	2003/0089901	05/15/2003	Fitzgerald			07/16/2001
	A55	09/906,545	07/16/2001	Fitzgerald			
	A56	09/906,200	07/16/2001	Fitzgerald			
	A57	10/164,665	06/07/2002	Currie et al.			

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FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT	ATTY DOCKET NO.:	ASC-012DV
	APPLICANTS:	Lee et al.
	SERIAL NO.:	Not yet assigned
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	A58	4,920,076	04/24/1990	Holland et al.			
	A59	5,312,766	05/17/1994	Aronowitz et al.			
	A60	5,327,375	07/05/1994	Harari			

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	B25	0 844 651 A1	05/27/1998	EP				NO	YES

OTHER ART, JOURNAL ARTICLES, ETC.		
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
EXAMINER		DATE CONSIDERED

FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT	ATTORNEY DOCKET NO.: ASC-012DV
	APPLICANTS: Lee et al.
	SERIAL NO.: Not yet assigned
	FILING DATE: Herewith GROUP: Not yet assigned

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	C71	Srolovitz, "On the Stability of Surfaces of Stressed Solids," <u>Acta metall.</u> , Vol. 37, No. 2 (1989) pp. 621-625.
	C72	Cullis et al, "The characteristics of strain-modulated surface undulations formed upon epitaxial Si _{1-x} Ge _x alloy layers on Si," <u>Journal of Crystal Growth</u> , Vol 123 (1992) pp. 333-343.

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	A61	5,461,243	10/24/1995	Ek et al.					
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EXAM INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
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	C73	Wolf et al., "Silicon Processing for the VLSI Era, Volume 1: Process Technology" (1986) pp. 201.							
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SERIAL NO.: Not yet assigned

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	A62	5,847,419	12/08/1998	Imai et al.			

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EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A63	5,847,419	12/08/1998	Imai et al.			
	A64	6,593,191	07/15/2003	Fitzgerald			05/16/2001
	A65	6,600,170	07/29/2003	Xiang			12/17/2001

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EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C73	International Search Report for PCT/US03/17275, dated October 14, 2003.

EXAMINER	DATE CONSIDERED
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FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT	ATTY DOCKET NO.:	ASC-012DV
	APPLICANTS:	Lee et al.
	SERIAL NO.:	Not yet assigned
	FILING DATE:	Herewith
	GROUP:	Not yet assigned

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EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A66	5,155,571	10/13/1992	Wang et al.			
	A67	6,407,406	06/18/2002	Tezuka			
	A68	6,555,839	04/29/2003	Fitzgerald			05/16/2001
	A69	6,583,437	06/24/2003	Mizuno et al.			03/19/2001
	A70	6,593,641	07/15/2003	Fitzgerald			07/16/2001
	A71	6,649,480	11/18/2003	Fitzgerald et al.			06/19/2001
	A72	2003/0052334	03/20/2003	Lee et al.			06/18/2002

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	B26	9-219524	08/19/1997	JP				No	Yes, Abstract Only
	B27	2000-21783	01/21/2000	JP				No	Yes, Abstract Only
	B28	2001-160594	06/12/2001	JP				No	Yes, Abstract Only
	B29	2001-168342	06/22/2001	JP				No	Yes, Abstract Only

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	C73	Yeo et al., "Enhanced Performance in Sub-100 nm CMOSFETs Using Strained Epitaxial Silicon-Germanium" IEEE, <u>Proceedings of IEDM Conference 2000, Piscataway, New Jersey</u> , (December 10, 2000) pp. 753-756.
	C74	Mizuno et al., "Advanced SOI-MOSFETs with Strained-Si Channel for High Speed CMOS Electron/Hole Mobility Enhancement," <u>2000 Symposium on VLSI Digest of Technology Papers</u> (June 13, 2000) pp. 210-211.
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